10/789,835
SPECIE SEARCH

FILE 'HOME' ENTERED AT 16:10:46 ON 29 JAN 2007

=> **file registry**

COST IN U.S. DOLLARS	SINCE FILE ENTRY	TOTAL SESSION
FULL ESTIMATED COST	0.21	0.21

FILE 'REGISTRY' ENTERED AT 16:10:59 ON 29 JAN 2007

Property values tagged with IC are from the ZIC/VINITI data file provided by InfoChem.

STRUCTURE FILE UPDATES: 28 JAN 2007 HIGHEST RN 918629-37-5
DICTIONARY FILE UPDATES: 28 JAN 2007 HIGHEST RN 918629-37-5

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TSCA INFORMATION NOW CURRENT THROUGH June 30, 2006

Please note that search-term pricing does apply when conducting SmartSELECT searches.

REGISTRY includes numerically searchable data for experimental and predicted properties as well as tags indicating availability of experimental property data in the original document. For information on property searching in REGISTRY, refer to:

http://www.cas.org/ONLINE/UG/regprops.html

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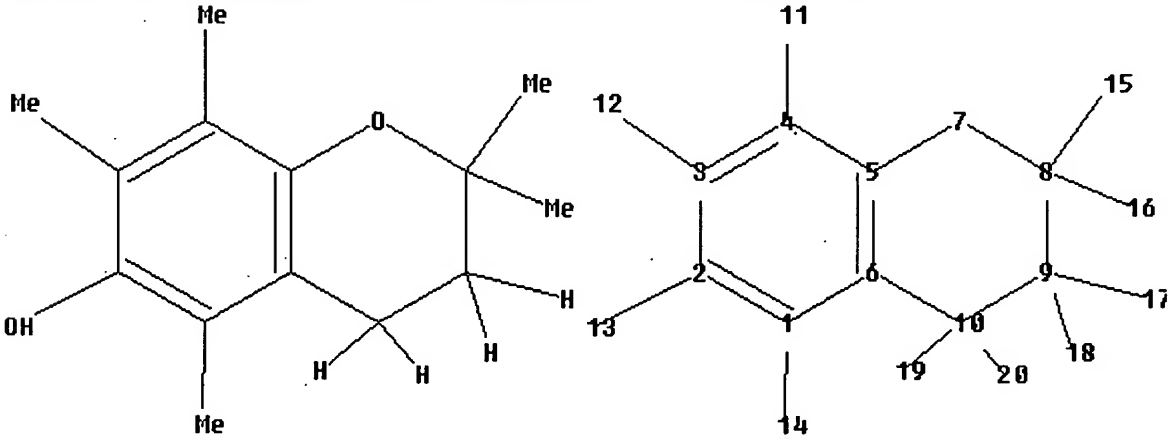
Uploading C:\Program Files\Stnexp\Queries\10789835_clm6.str



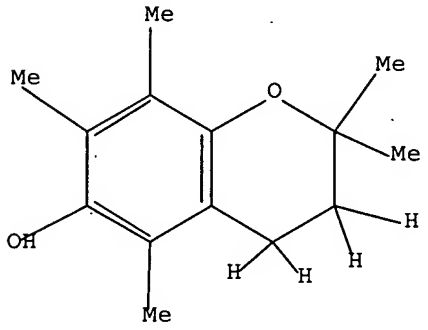
chain nodes :
11 12 13 14 15 16 17 18 19 20
ring nodes :
1 2 3 4 5 6 7 8 9 10
chain bonds :
1-14 2-13 3-12 4-11 8-15 8-16 9-17 9-18 10-19 10-20
ring bonds :
1-2 1-6 2-3 3-4 4-5 5-6 5-7 6-10 7-8 8-9 9-10
exact/norm bonds :

2-13 5-7 6-10 7-8 8-9 9-10
exact bonds :
1-14 3-12 4-11 8-15 8-16 9-17 9-18 10-19 10-20
normalized bonds :
1-2 1-6 2-3 3-4 4-5 5-6

Match level :
1:Atom 2:Atom 3:Atom 4:Atom 5:Atom 6:Atom 7:Atom 8:Atom 9:Atom 10:Atom
11:CLASS 12:CLASS 13:CLASS 14:CLASS 15:CLASS 16:CLASS 17:CLASS 18:CLASS
19:CLASS 20:CLASS

L1 STRUCTURE UPLOADED

=> **d l1**
L1 HAS NO ANSWERS
L1 STR



Structure attributes must be viewed using STN Express query preparation.

=> **s l1**
SAMPLE SEARCH INITIATED 16:11:16 FILE 'REGISTRY'
SAMPLE SCREEN SEARCH COMPLETED - 552 TO ITERATE

100.0% PROCESSED 552 ITERATIONS 0 ANSWERS
SEARCH TIME: 00.00.01

FULL FILE PROJECTIONS: ONLINE **COMPLETE**
                        BATCH **COMPLETE**
PROJECTED ITERATIONS: 9631 TO 12449
PROJECTED ANSWERS: 0 TO 0

L2 0 SEA SSS SAM L1

=> **s l1 exa full**
FULL SEARCH INITIATED 16:11:22 FILE 'REGISTRY'
FULL SCREEN SEARCH COMPLETED - 66 TO ITERATE

100.0% PROCESSED 66 ITERATIONS 7 ANSWERS

SEARCH TIME: 00.00.01

L3 7 SEA EXA FUL L1

=> **file medline, caplus, wpids, uspatfull**
COST IN U.S. DOLLARS SINCE FILE ENTRY TOTAL SESSION
FULL ESTIMATED COST 58.25 58.46

FILE 'MEDLINE' ENTERED AT 16:11:32 ON 29 JAN 2007

FILE 'CAPLUS' ENTERED AT 16:11:32 ON 29 JAN 2007
USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT.
PLEASE SEE "HELP USAGETERMS" FOR DETAILS.

FILE 'WPIDS' ENTERED AT 16:11:32 ON 29 JAN 2007

FILE 'USPATFULL' ENTERED AT 16:11:32 ON 29 JAN 2007

=> **s l3**
SAMPLE SEARCH INITIATED 16:11:37 FILE 'WPIDS'
SAMPLE SCREEN SEARCH COMPLETED - 62 TO ITERATE

100.0% PROCESSED 62 ITERATIONS 0 ANSWERS
SEARCH TIME: 00.00.01

FULL FILE PROJECTIONS: ONLINE **COMPLETE**
BATCH **COMPLETE**
PROJECTED ITERATIONS: 384 TO 856
PROJECTED ANSWERS: 0 TO 0

L4 494 L3

=> **s l4 not py>2004**
L5 443 L4 NOT PY>2004

=> **s l5 and cancer**
L6 10 L5 AND CANCER

=> **d l6 1-10 ibib, abs, hitstr**

L6 ANSWER 1 OF 10 MEDLINE on STN
ACCESSION NUMBER: 2003400986 MEDLINE Full-text
DOCUMENT NUMBER: PubMed ID: 12939470
TITLE: Androgen antagonist activity by the antioxidant moiety of vitamin E, 2,2,5,7,8-pentamethyl-6-chromanol in human prostate carcinoma cells.
AUTHOR: Thompson Todd A; Wilding George
CORPORATE SOURCE: University of Wisconsin Comprehensive Cancer Center, University of Wisconsin-Madison, Madison, Wisconsin 53792, USA.
SOURCE: Molecular cancer therapeutics, (2003 Aug) Vol. 2, No. 8, pp. 797-803.
Journal code: 101132535. ISSN: 1535-7163.
PUB. COUNTRY: United States
DOCUMENT TYPE: Journal; Article; (JOURNAL ARTICLE)
LANGUAGE: English

FILE SEGMENT: Priority Journals
ENTRY MONTH: 200406
ENTRY DATE: Entered STN: 27 Aug 2003
Last Updated on STN: 24 Jun 2004
Entered Medline: 21 Jun 2004

AB Antioxidants, such as vitamin E, are being investigated for efficacy in prostate cancer prevention. In this study, we show that the antioxidant moiety of vitamin E, 2,2,5,7,8-pentamethyl-6-chromanol (PMCol), has antiandrogen activity in prostate carcinoma cells. In the presence of PMCol, the androgen-stimulated biphasic growth curve of LNCaP human prostate carcinoma cells was shifted to the right. The PMCol-induced growth shift was similar to that produced by treatment with the pure antiandrogen bicalutamide (i.e., Casodex), indicative of androgen receptor (AR) antagonist activity. The concentration of PMCol used was below the concentration required to affect cell growth or viability in the absence of androgen. Using an AR binding competition assay, PMCol was found to be a potent antiandrogen in both LNCaP and LAPC4 cells, with an IC(50) of approximately 10 micro M against 1 nM R1881 (methyltrienolone; a stable, synthetic androgen). Prostate-specific antigen release from LNCaP cells produced by androgen exposure with either 0.05 or 1.0 nM R1881 was inhibited 100% and 80%, respectively, by 30 micro M PMCol. Also, PMCol inhibited androgen-induced promoter activation in both LNCaP and LAPC4 cells. However, PMCol did not affect AR protein levels, suggesting that the inhibitory effects of PMCol on androgenic pathways were not due to decreased expression of the AR. Therefore, growth modulation by the antioxidant moiety of vitamin E in androgen-sensitive prostate carcinoma cells is due, at least in part, to its potent antiandrogenic activity.

L6 ANSWER 2 OF 10 CAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 2003:665773 CAPLUS Full-text
DOCUMENT NUMBER: 140:52950
TITLE: Androgen Antagonist Activity by the Antioxidant Moiety of Vitamin E, 2,2,5,7,8-Pentamethyl-6-chromanol in Human Prostate Carcinoma Cells
AUTHOR(S): Thompson, Todd A.; Wilding, George
CORPORATE SOURCE: University of Wisconsin Comprehensive Cancer Center and University of Wisconsin Department of Medicine, University of Wisconsin-Madison, Madison, WI, 53792, USA
SOURCE: Molecular Cancer Therapeutics (2003), 2(8), 797-803
CODEN: MCTOCF; ISSN: 1535-7163
PUBLISHER: American Association for Cancer Research
DOCUMENT TYPE: Journal
LANGUAGE: English

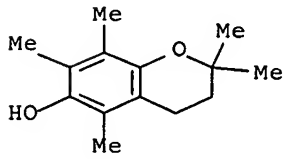
AB Antioxidants, such as vitamin E, are being investigated for efficacy in prostate cancer prevention. In this study, we show that the antioxidant moiety of vitamin E, 2,2,5,7,8-pentamethyl-6-chromanol (PMCol), has antiandrogen activity in prostate carcinoma cells. In the presence of PMCol, the androgen-stimulated biphasic growth curve of LNCaP human prostate carcinoma cells was shifted to the right. The PMCol-induced growth shift was similar to that produced by treatment with the pure antiandrogen bicalutamide (i.e., Casodex), indicative of androgen receptor (AR) antagonist activity. The concentration of PMCol used was below the concentration required to affect cell growth or viability in the absence of androgen. Using an AR binding competition assay, PMCol was found to be a potent antiandrogen in both LNCaP and LAPC4 cells, with an IC50 of approx. 10 μM against 1 nM R1881 (methyltrienolone; a stable, synthetic androgen). Prostate-specific antigen release from LNCaP cells produced by androgen exposure with either 0.05 or 1.0 nM R1881 was inhibited 100% and 80%, resp., by 30 μM PMCol. Also, PMCol inhibited androgen-induced promoter activation in both LNCaP and LAPC4 cells.

However, PMCol did not affect AR protein levels, suggesting that the inhibitory effects of PMCol on androgenic pathways were not due to decreased expression of the AR. Therefore, growth modulation by the antioxidant moiety of vitamin E in androgen-sensitive prostate carcinoma cells is due, at least in part, to its potent antiandrogenic activity.

IT 950-99-2, 2,2,5,7,8-Pentamethyl-6-chromanol
RL: DMA (Drug mechanism of action); PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(androgen antagonist activity by the antioxidant moiety of vitamin E, 2,2,5,7,8-pentamethyl-6-chromanol in human prostate carcinoma cells)

RN 950-99-2 CAPLUS

CN 2H-1-Benzopyran-6-ol, 3,4-dihydro-2,2,5,7,8-pentamethyl- (9CI) (CA INDEX NAME)



REFERENCE COUNT: 31 THERE ARE 31 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L6 ANSWER 3 OF 10 CAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER: 1999:602318 CAPLUS Full-text

DOCUMENT NUMBER: 131:295249

TITLE: Mechanism-based chemopreventive strategies against etoposide-induced acute myeloid leukemia: free radical/antioxidant approach

AUTHOR(S): Kagan, Valerian E.; Yalowich, Jack C.; Borisenko, Grigory G.; Tyurina, Yulia Y.; Tyurin, Vladimir A.; Thampatty, Padmakumari; Fabisiak, James P.

CORPORATE SOURCE: Departments of Environmental and Occupational Health and Pharmacology and University of Pittsburgh Cancer Institute, University of Pittsburgh, Pittsburgh, PA, USA

SOURCE: Molecular Pharmacology (1999), 56(3), 494-506
CODEN: MOPMA3; ISSN: 0026-895X

PUBLISHER: American Society for Pharmacology and Experimental Therapeutics

DOCUMENT TYPE: Journal

LANGUAGE: English

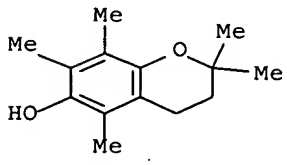
AB Etoposide (VP-16) is extensively used to treat cancer, yet its efficacy is calamitously associated with an increased risk of secondary acute myelogenous leukemia. The mechanisms for the extremely high susceptibility of myeloid stem cells to the leukemogenic effects of etoposide have not been elucidated. We propose a mechanism to account for the etoposide-induced secondary acute myelogenous leukemia and nutritional strategies to prevent this complication of etoposide therapy. We hypothesize that etoposide phenoxyl radicals (etoposide-O) formed from etoposide by myeloperoxidase are responsible for its genotoxic effects in bone marrow progenitor cells, which contain constitutively high myeloperoxidase activity. Here, we used purified human myeloperoxidase, as well as human leukemia HL60 cells with high myeloperoxidase activity and provide evidence of the following. 1. Etoposide undergoes one-electron oxidation to etoposide-O· catalyzed by both purified myeloperoxidase and myeloperoxidase activity in HL60 cells; formation of

etoposide-O·radicals is completely blocked by myeloperoxidase inhibitors, cyanide and azide. 2. Intracellular reductants, GSH and protein sulfhydryls (but not phospholipids), are involved in myeloperoxidase-catalyzed etoposide redox-cycling that oxidizes endogenous thiols; pretreatment of HL60 cells with a maleimide thiol reagent, ThioGlo1, prevents redox-cycling of etoposide-O· radicals and permits their direct ESR detection in cell homogenates. VP-16 redox-cycling by purified myeloperoxidase (in the presence of GSH) or by myeloperoxidase activity in HL60 cells is accompanied by generation of thiyl radicals, GS·, determined by HPLC assay of 5,5-dimethyl-1- pyrroline glytathionyl N-oxide glytathionyl nitrone adducts. 3. Ascorbate directly reduces etoposide-O·, thus competitively inhibiting etoposide-O·-induced thiol oxidation Ascorbate also diminishes etoposide-induced topo II-DNA complex formation in myeloperoxidase-rich HL60 cells (but not in HL60 cells with myeloperoxidase activity depleted by pretreatment with succinyl acetone). 4. A vitamin E homolog, 2,2,5,7,8-pentamethyl-6-hydroxychromane, a hindered phenolic compound whose phenoxyl radicals do not oxidize endogenous thiols, effectively competes with etoposide as a substrate for myeloperoxidase, thus preventing etoposide-O·-induced redox-cycling. We conclude that nutritional antioxidant strategies can be targeted at minimizing etoposide conversion to etoposide-O·, thus minimizing the genotoxic effects of the radicals in bone marrow myelogenous progenitor cells, i.e., chemoprevention of etoposide-induced acute myelogenous leukemia.

IT 950-99-2
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(mechanism-based chemopreventive strategies against etoposide-induced acute myeloid leukemia: free radical/antioxidant approach)

RN 950-99-2 CAPLUS

CN 2H-1-Benzopyran-6-ol, 3,4-dihydro-2,2,5,7,8-pentamethyl- (9CI) (CA INDEX NAME)



REFERENCE COUNT: 42 THERE ARE 42 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L6 ANSWER 4 OF 10 USPATFULL on STN

ACCESSION NUMBER: 2004:300069 USPATFULL Full-text

TITLE: Tocopherols, tocotrienols, other chroman and side chain derivatives and uses thereof

INVENTOR(S): Sanders, Bob G., Austin, TX, UNITED STATES
Kline, Kimberly, Austin, TX, UNITED STATES
Hurley, Laurence, Austin, TX, UNITED STATES
Gardner, Robb, Austin, TX, UNITED STATES
Menchaca, Marla, Austin, TX, UNITED STATES
Yu, Weiping, Austin, TX, UNITED STATES
Ramanan, Puthucode N., Austin, TX, UNITED STATES
Liu, Shenquan, Austin, TX, UNITED STATES
Israel, Karen, Austin, TX, UNITED STATES

PATENT ASSIGNEE(S): Research Development Foundation (U.S. corporation)

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 2004235938	A1	20041125
APPLICATION INFO.:	US 2003-644418	A1	20030820 (10)

RELATED APPLN. INFO.: Division of Ser. No. US 2000-502592, filed on 11 Feb 2000, GRANTED, Pat. No. US 6770672 Continuation-in-part of Ser. No. US 1999-404001, filed on 23 Sep 1999, GRANTED, Pat. No. US 6417223

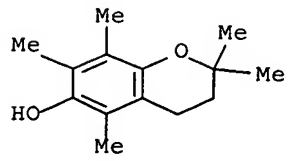
	NUMBER	DATE
PRIORITY INFORMATION:	US 1998-101542P	19980923 (60)

DOCUMENT TYPE: Utility
FILE SEGMENT: APPLICATION
LEGAL REPRESENTATIVE: Benjamin Aaron Adler, ADLER & ASSOCIATES, 8011 Candle Lane, Houston, TX, 77071
NUMBER OF CLAIMS: 30
EXEMPLARY CLAIM: 1
NUMBER OF DRAWINGS: 21 Drawing Page(s)
LINE COUNT: 2556
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB The present invention provides an antiproliferative compound having the structural formula ##STR1##

wherein X is oxygen, nitrogen or sulfur; Y is selected from the group consisting of oxygen, nitrogen and sulfur wherein when Y is oxygen or nitrogen, n is 1 and when Y is sulfur, n is 0. Also provided is a method for inducing apoptosis in a cell comprising administering a composition comprising a compound.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.
IT 950-99-2
(preparation of tocopherols, tocotrienols, other chroman and side chain derivs. for use as antitumor agents and for inducing cell apoptosis)
RN 950-99-2 USPATFULL
CN 2H-1-Benzopyran-6-ol, 3,4-dihydro-2,2,5,7,8-pentamethyl- (9CI) (CA INDEX NAME)



L6 ANSWER 5 OF 10 USPATFULL on STN
ACCESSION NUMBER: 2004:192666 USPATFULL Full-text
TITLE: Tocopherols, tocotrienols, other chroman and side chain derivatives and uses thereof
INVENTOR(S): Sanders, Bob G., Austin, TX, United States
Kline, Kimberly, Austin, TX, United States
Hurley, Laurence, Austin, TX, United States
Gardner, Robb, Austin, TX, United States
Menchaca, Marla, Austin, TX, United States

Yu, Weiping, Austin, TX, United States
Ramanan, Puthucode N., Austin, TX, United States
Liu, Shenquan, Austin, TX, United States
Israel, Karen, Austin, TX, United States
PATENT ASSIGNEE(S): Research Development Foundation, Carson City, NV, United States (U.S. corporation)

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 6770672	B1	20040803
APPLICATION INFO.:	US 2000-502592		20000211 (9)

RELATED APPLN. INFO.: Continuation-in-part of Ser. No. US 1999-404001, filed on 23 Sep 1999, now patented, Pat. No. US 6417223, issued on 9 Jul 2002

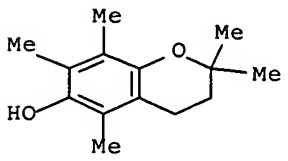
	NUMBER	DATE
PRIORITY INFORMATION:	US 1998-101543P	19980923 (60)

DOCUMENT TYPE: Utility
FILE SEGMENT: GRANTED
PRIMARY EXAMINER: Fonda, Kathleen K.
ASSISTANT EXAMINER: Maier, Leigh C.
LEGAL REPRESENTATIVE: Adler, Benjamin Aaron
NUMBER OF CLAIMS: 4
EXEMPLARY CLAIM: 1
NUMBER OF DRAWINGS: 18 Drawing Figure(s); 21 Drawing Page(s)
LINE COUNT: 2359
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB The present invention provides an antiproliferative compound having the structural formula ##STR1##

wherein X is oxygen, nitrogen or sulfur; Y is selected from the group consisting of oxygen, nitrogen and sulfur wherein when Y is oxygen or nitrogen, n is 1 and when Y is sulfur, n is 0. Also provided is a method for inducing apoptosis in a cell comprising administering a composition comprising a compound.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.
IT 950-99-2, 2,2,5,7,8-Pentamethyl-6-chromanol
(preparation of tocopherols, tocotrienols, other chroman and side chain derivs. for therapeutic use in prevention and treatment of cancer)
RN 950-99-2 USPATFULL
CN 2H-1-Benzopyran-6-ol, 3,4-dihydro-2,2,5,7,8-pentamethyl- (9CI) (CA INDEX NAME)



L6 ANSWER 6 OF 10 USPATFULL on STN
ACCESSION NUMBER: 2004:127448 USPATFULL Full-text

TITLE: Tocopherols, tocotrienols, other chroman and side chain derivatives and uses thereof

INVENTOR(S): Sanders, Bob G., Austin, TX, UNITED STATES
Kline, Kimberly, Austin, TX, UNITED STATES
Yu, Weiping, Austin, TX, UNITED STATES
PATENT ASSIGNEE(S): Research Development Foundation (U.S. corporation)

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 2004097431	A1	20040520
APPLICATION INFO.:	US 2003-695275	A1	20031028 (10)

RELATED APPLN. INFO.: Division of Ser. No. US 2001-8066, filed on 5 Nov 2001, GRANTED, Pat. No. US 6703384 Continuation-in-part of Ser. No. US 2000-502592, filed on 11 Feb 2000, PENDING Continuation-in-part of Ser. No. US 1999-404001, filed on 23 Sep 1999, GRANTED, Pat. No. US 6417223

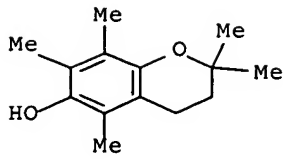
	NUMBER	DATE
PRIORITY INFORMATION:	US 1998-101542P	19980923 (60)

DOCUMENT TYPE: Utility
FILE SEGMENT: APPLICATION
LEGAL REPRESENTATIVE: Benjamin Aaron Adler, Ph.D., J.D., Adler & Associates, 8011 Candle Lane, Houston, TX, 77071
NUMBER OF CLAIMS: 17
EXEMPLARY CLAIM: 1
NUMBER OF DRAWINGS: 11 Drawing Page(s)
LINE COUNT: 2605
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB The present invention provides an antiproliferative compound having a structural formula ##STR1##

where X and Y independently are oxygen, nitrogen or sulfur; R.sup.1 is alkyl, alkenyl, alkynyl, aryl, heteroaryl, carboxylic acid, carboxylate, carboxamide, ester, thioamide, thiolacid, thiolester, saccharide, alkoxy-linked saccharide, amine, sulfonate, sulfate, phosphate, alcohol, ethers or nitrites; R.sup.2 and R.sup.3 are hydrogen or R.sup.4; R.sup.4 is methyl, benzyl carboxylic acid, benzyl carboxylate, benzyl carboxamide, benzylester, saccharide or amine; and R.sup.5 is alkenyl; where when Y is nitrogen, said nitrogen is substituted with R.sup.6, wherein R.sup.6 is hydrogen or methyl. Also provided are methods for treating a cell proliferative disease and for inducing apoptosis in a cell comprising administering this compound is also provided.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.
IT 950-99-2
(preparation of tocopherols, tocotrienols, other chroman and side chain derivs. for use as antitumor agents and for inducing cell apoptosis)
RN 950-99-2 USPATFULL
CN 2H-1-Benzopyran-6-ol, 3,4-dihydro-2,2,5,7,8-pentamethyl- (9CI) (CA INDEX NAME)



L6 ANSWER 7 OF 10 USPATFULL on STN

ACCESSION NUMBER:	2002:280579 USPATFULL Full-text
TITLE:	Tocopherols, tocotrienols, other chroman and side chain derivatives and uses thereof
INVENTOR(S):	Sanders, Bob G., Austin, TX, UNITED STATES Kline, Kimberly, Austin, TX, UNITED STATES Hurley, Laurence, Austin, TX, UNITED STATES Gardner, Robb, Austin, TX, UNITED STATES Menchaca, Marla, Austin, TX, UNITED STATES Yu, Weiping, Austin, TX, UNITED STATES Ramanan, Puthucode N., Austin, TX, UNITED STATES Liu, Shenquan, Austin, TX, UNITED STATES Israel, Karen, Austin, TX, UNITED STATES
PATENT ASSIGNEE(S):	Research Development Foundation (U.S. corporation)

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 2002156024	A1	20021024
	US 6645998	B2	20031111
APPLICATION INFO.:	US 2002-122019	A1	20020412 (10)
RELATED APPLN. INFO.:	Division of Ser. No. US 1999-404001, filed on 23 Sep 1999, GRANTED, Pat. No. US 6417223		

	NUMBER	DATE
PRIORITY INFORMATION:	US 1998-101542P	19980923 (60)

DOCUMENT TYPE:	Utility
FILE SEGMENT:	APPLICATION
LEGAL REPRESENTATIVE:	Benjamin Aaron Adler, ADLER & ASSOCIATES, 8011 Candle Lane, Houston, TX, 77071
NUMBER OF CLAIMS:	20
EXEMPLARY CLAIM:	1
NUMBER OF DRAWINGS:	14 Drawing Page(s)
LINE COUNT:	2170

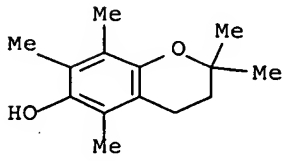
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB The present invention provides an antiproliferative compound having the structural formula ##STR1##

wherein X is oxygen, nitrogen or sulfur; R.sup.1 is alkyl, alkenyl, alkynyl, aryl, heteroaryl, carboxylic acid, carboxylate, carboxamide, ester, thioamide, thiolacid, thiolester, saccharide, alkoxy-linked saccharide, amine, sulfonate, sulfate, phosphate, alcohol, ethers and nitriles; R.sup.2 is hydrogen, methyl, benzyl carboxylic acid, benzyl carboxylate, benzyl carboxamide, benzylester, saccharide and amine; R.sup.3 is selected from the group consisting of hydrogen, methyl, benzyl carboxylic acid, benzyl carboxylate, benzyl carboxamide, benzylester, saccharide and amine; R.sup.4 is of methyl, benzyl carboxylic acid, benzyl carboxylate, benzyl carboxamide, benzylester, saccharide and amine; and R.sup.5 is alkyl, alkenyl, alkynyl, aryl, heteroaryl, carboxyl, amide and ester. Also provided

is a method for inducing apoptosis in a cell comprising administering a composition comprising a compound.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.
IT 950-99-2
(preparation of tocopherols, tocotrienols, other chroman and side chain derivs. for use as antitumor agents and for inducing cell apoptosis)
RN 950-99-2 USPATFULL
CN 2H-1-Benzopyran-6-ol, 3,4-dihydro-2,2,5,7,8-pentamethyl- (9CI) (CA INDEX NAME)



L6 ANSWER 8 OF 10 USPATFULL on STN
ACCESSION NUMBER: 2002:199098 USPATFULL Full-text
TITLE: Tocopherols, tocotrienols, other chroman and side chain derivatives and uses thereof
INVENTOR(S): Sanders, Bob G., Austin, TX, UNITED STATES
Kline, Kimberly, Austin, TX, UNITED STATES
Yu, Weiping, Austin, TX, UNITED STATES

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 2002107207	A1	20020808
	US 6703384	B2	20040309
APPLICATION INFO.:	US 2001-8066	A1	20011105 (10)

RELATED APPLN. INFO.: Continuation-in-part of Ser. No. US 2000-502592, filed on 11 Feb 2000, PENDING Continuation-in-part of Ser. No. US 1999-404001, filed on 23 Sep 1999, PENDING

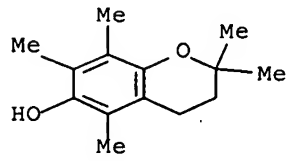
	NUMBER	DATE
PRIORITY INFORMATION:	US 1998-101542P	19980923 (60)

DOCUMENT TYPE: Utility
FILE SEGMENT: APPLICATION
LEGAL REPRESENTATIVE: Benjamin Aaron Adler, ADLER & ASSOCIATES, 8011 Candle Lane, Houston, TX, 77071
NUMBER OF CLAIMS: 24
EXEMPLARY CLAIM: 1
NUMBER OF DRAWINGS: 12 Drawing Page(s)
LINE COUNT: 2606
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB The present invention provides an antiproliferative compound having a structural formula ##STR1##

where X and Y independently are oxygen, nitrogen or sulfur; R.sup.1 is alkyl, alkenyl, alkynyl, aryl, heteroaryl, carboxylic acid, carboxylate, carboxamide, ester, thioamide, thiolacid, thiolester, saccharide, alkoxy-linked saccharide, amine, sulfonate, sulfate, phosphate, alcohol, ethers or

nitrites; R.sup.2 and R.sup.3 are hydrogen or R.sup.4; R.sup.4 is methyl, benzyl carboxylic acid, benzyl carboxylate, benzyl carboxamide, benzylester, saccharide or amine; and R.sup.5 is alkenyl; where when Y is nitrogen, said nitrogen is substituted with R.sup.6, wherein R.sup.6 is hydrogen or methyl. Also provided are methods for treating a cell proliferative disease and for inducing apoptosis in a cell comprising administering this compound is also provided.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.
IT 950-99-2, 2,2,5,7,8-Pentamethyl-6-chromanol
(preparation of tocopherols, tocotrienols, other chromans and side chain derivs. as potential antiproliferative, proapoptotic agents for the treatment of cancer)
RN 950-99-2 USPATFULL
CN 2H-1-Benzopyran-6-ol, 3,4-dihydro-2,2,5,7,8-pentamethyl- (9CI) (CA INDEX NAME)



L6 ANSWER 9 OF 10 USPATFULL on STN
ACCESSION NUMBER: 2002:168253 USPATFULL Full-text
TITLE: Tocopherols, tocotrienols, other chroman and side chain derivatives and uses therof
INVENTOR(S): Sanders, Bob G., Austin, TX, United States
Kline, Kimberly, Austin, TX, United States
Hurley, Laurence, Austin, TX, United States
Gardner, Robb, Austin, TX, United States
Menchaca, Marla, Austin, TX, United States
Yu, Weiping, Austin, TX, United States
Ramanan, Puthucode N., Austin, TX, United States
Liu, Shenquan, Austin, TX, United States
Israel, Karen, Austin, TX, United States
PATENT ASSIGNEE(S): Research Development Foundation, Carson City, NV, United States (U.S. corporation)

	NUMBER	KIND	DATE	
PATENT INFORMATION:	US 6417223	B1	20020709	
APPLICATION INFO.:	US 1999-404001		19990923	(9)

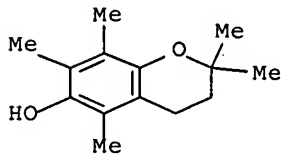
	NUMBER	DATE
PRIORITY INFORMATION:	US 1998-101542P	19980923 (60)

DOCUMENT TYPE: Utility
FILE SEGMENT: GRANTED
PRIMARY EXAMINER: Wilson, James O.
ASSISTANT EXAMINER: Maier, Leigh C.
LEGAL REPRESENTATIVE: Adler, Benjamin Aaron
NUMBER OF CLAIMS: 3
EXEMPLARY CLAIM: 1

NUMBER OF DRAWINGS: 14 Drawing Figure(s); 14 Drawing Page(s)
LINE COUNT: 1959
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB The present invention provides an antiproliferative compound having the structural formula ##STR1##

wherein X is oxygen, nitrogen or sulfur; R.sup.1 is alkyl, alkenyl, alkynyl, aryl, heteroaryl, carboxylic acid, carboxylate, carboxamide, ester, thioamide, thiolacid, thiolester, saccharide, alkoxy-linked saccharide, amine, sulfonate, sulfate, phosphate, alcohol, ethers and nitriles; R.sup.2 is hydrogen, methyl, benzyl carboxylic acid, benzyl carboxylate, benzyl carboxamide, benzylester, saccharide and amine; R.sup.3 is selected from the group consisting of hydrogen, methyl, benzyl carboxylic acid, benzyl carboxylate, benzyl carboxamide, benzylester, saccharide and amine; R.sup.4 is of methyl, benzyl carboxylic acid, benzyl carboxylate, benzyl carboxamide, benzylester, saccharide and amine; and R.sup.5 is alkyl, alkenyl, alkynyl, aryl, heteroaryl, carboxyl, amide and ester. Also provided is a method for inducing apoptosis in a cell comprising administering a composition comprising a compound.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.
IT 950-99-2
(preparation of tocopherols, tocotrienols, other chroman and side chain derivs. for use as antitumor agents and for inducing cell apoptosis)
RN 950-99-2 USPATFULL
CN 2H-1-Benzopyran-6-ol, 3,4-dihydro-2,2,5,7,8-pentamethyl- (9CI) (CA INDEX NAME)



L6 ANSWER 10 OF 10 USPATFULL on STN
ACCESSION NUMBER: 92:55640 USPATFULL Full-text
TITLE: Oxidized diphenylheteroalkanes
INVENTOR(S): Janssen, Bernd, Ludwigshafen, Germany, Federal Republic of
Wuest, Hans-Heiner, Dossenheim, Germany, Federal Republic of
PATENT ASSIGNEE(S): BASF Aktiengesellschaft, Ludwigshafen, Germany, Federal Republic of (non-U.S. corporation)

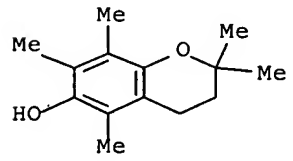
	NUMBER	KIND	DATE	
PATENT INFORMATION:	US 5128479		19920707	
APPLICATION INFO.:	US 1990-471886		19900129	(7)

	NUMBER	DATE
PRIORITY INFORMATION:	DE 1989-3903988	19890210

DOCUMENT TYPE: Utility

FILE SEGMENT: Granted
PRIMARY EXAMINER: Raymond, Richard L.
LEGAL REPRESENTATIVE: Oblon, Spivak, McClelland, Maier & Neustadt
NUMBER OF CLAIMS: 4
EXEMPLARY CLAIM: 1
LINE COUNT: 1176
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB Oxidized diphenylheteroalkanes of the formula I ##STR1## where R.sup.1 to R.sup.6 and A have the meanings specified in the description, and the preparation thereof are described. The substances are suitable for controlling diseases and as cosmetic agents.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.
IT 950-99-2P, 2,2,5,7,8-Pentamethylchroman-6-ol
(preparation and reaction of, in preparation of drugs)
RN 950-99-2 USPATFULL
CN 2H-1-Benzopyran-6-ol, 3,4-dihydro-2,2,5,7,8-pentamethyl- (9CI) (CA INDEX NAME)



=> **d his**

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FILE 'REGISTRY' ENTERED AT 16:10:59 ON 29 JAN 2007
L1 STRUCTURE UPLOADED
L2 0 S L1
L3 7 S L1 EXA FULL

FILE 'MEDLINE, CAPLUS, WPIDS, USPATFULL' ENTERED AT 16:11:32 ON 29 JAN 2007
L4 494 S L3
L5 443 S L4 NOT PY>2004
L6 10 S L5 AND CANCER

=> **s l5 and "prostate cancer"**
2 FILES SEARCHED...
L7 8 L5 AND "PROSTATE CANCER"

=> **d l7 1-8 ibib, abs, hitstr**

L7 ANSWER 1 OF 8 MEDLINE on STN
ACCESSION NUMBER: 2003400986 MEDLINE Full-text
DOCUMENT NUMBER: PubMed ID: 12939470
TITLE: Androgen antagonist activity by the antioxidant moiety of vitamin E, 2,2,5,7,8-pentamethyl-6-chromanol in human prostate carcinoma cells.
AUTHOR: Thompson Todd A; Wilding George

CORPORATE SOURCE: University of Wisconsin Comprehensive Cancer Center, University of Wisconsin-Madison, Madison, Wisconsin 53792, USA.
SOURCE: Molecular cancer therapeutics, (2003 Aug) Vol. 2, No. 8, pp. 797-803.
Journal code: 101132535. ISSN: 1535-7163.
PUB. COUNTRY: United States
DOCUMENT TYPE: Journal; Article; (JOURNAL ARTICLE)
LANGUAGE: English
FILE SEGMENT: Priority Journals
ENTRY MONTH: 200406
ENTRY DATE: Entered STN: 27 Aug 2003
Last Updated on STN: 24 Jun 2004
Entered Medline: 21 Jun 2004

AB Antioxidants, such as vitamin E, are being investigated for efficacy in prostate cancer prevention. In this study, we show that the antioxidant moiety of vitamin E, 2,2,5,7,8-pentamethyl-6-chromanol (PMCol), has antiandrogen activity in prostate carcinoma cells. In the presence of PMCol, the androgen-stimulated biphasic growth curve of LNCaP human prostate carcinoma cells was shifted to the right. The PMCol-induced growth shift was similar to that produced by treatment with the pure antiandrogen bicalutamide (i.e., Casodex), indicative of androgen receptor (AR) antagonist activity. The concentration of PMCol used was below the concentration required to affect cell growth or viability in the absence of androgen. Using an AR binding competition assay, PMCol was found to be a potent antiandrogen in both LNCaP and LAPC4 cells, with an IC(50) of approximately 10 micro M against 1 nM R1881 (methyltrienolone; a stable, synthetic androgen). Prostate-specific antigen release from LNCaP cells produced by androgen exposure with either 0.05 or 1.0 nM R1881 was inhibited 100% and 80%, respectively, by 30 micro M PMCol. Also, PMCol inhibited androgen-induced promoter activation in both LNCaP and LAPC4 cells. However, PMCol did not affect AR protein levels, suggesting that the inhibitory effects of PMCol on androgenic pathways were not due to decreased expression of the AR. Therefore, growth modulation by the antioxidant moiety of vitamin E in androgen-sensitive prostate carcinoma cells is due, at least in part, to its potent antiandrogenic activity.

L7 ANSWER 2 OF 8 CAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 2003:665773 CAPLUS Full-text
DOCUMENT NUMBER: 140:52950
TITLE: Androgen Antagonist Activity by the Antioxidant Moiety of Vitamin E, 2,2,5,7,8-Pentamethyl-6-chromanol in Human Prostate Carcinoma Cells
AUTHOR(S): Thompson, Todd A.; Wilding, George
CORPORATE SOURCE: University of Wisconsin Comprehensive Cancer Center and University of Wisconsin Department of Medicine, University of Wisconsin-Madison, Madison, WI, 53792, USA
SOURCE: Molecular Cancer Therapeutics (2003), 2(8), 797-803
CODEN: MCTOCF; ISSN: 1535-7163
PUBLISHER: American Association for Cancer Research
DOCUMENT TYPE: Journal
LANGUAGE: English

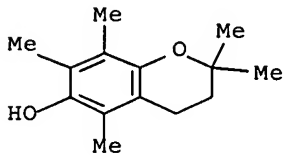
AB Antioxidants, such as vitamin E, are being investigated for efficacy in prostate cancer prevention. In this study, we show that the antioxidant moiety of vitamin E, 2,2,5,7,8-pentamethyl-6-chromanol (PMCol), has antiandrogen activity in prostate carcinoma cells. In the presence of PMCol, the androgen-stimulated biphasic growth curve of LNCaP human prostate carcinoma cells was shifted to the right. The PMCol-induced growth shift was similar to that produced by treatment with the pure antiandrogen bicalutamide

(i.e., Casodex), indicative of androgen receptor (AR) antagonist activity. The concentration of PMCol used was below the concentration required to affect cell growth or viability in the absence of androgen. Using an AR binding competition assay, PMCol was found to be a potent antiandrogen in both LNCaP and LAPC4 cells, with an IC50 of approx. 10 μM against 1 nM R1881 (methyltrienolone; a stable, synthetic androgen). Prostate-specific antigen release from LNCaP cells produced by androgen exposure with either 0.05 or 1.0 nM R1881 was inhibited 100% and 80%, resp., by 30 μM PMCol. Also, PMCol inhibited androgen-induced promoter activation in both LNCaP and LAPC4 cells. However, PMCol did not affect AR protein levels, suggesting that the inhibitory effects of PMCol on androgenic pathways were not due to decreased expression of the AR. Therefore, growth modulation by the antioxidant moiety of vitamin E in androgen-sensitive prostate carcinoma cells is due, at least in part, to its potent antiandrogenic activity.

IT 950-99-2, 2,2,5,7,8-Pentamethyl-6-chromanol
RL: DMA (Drug mechanism of action); PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(androgen antagonist activity by the antioxidant moiety of vitamin E, 2,2,5,7,8-pentamethyl-6-chromanol in human prostate carcinoma cells)

RN 950-99-2 CAPLUS

CN 2H-1-Benzopyran-6-ol, 3,4-dihydro-2,2,5,7,8-pentamethyl- (9CI) (CA INDEX NAME)



REFERENCE COUNT: 31 THERE ARE 31 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L7 ANSWER 3 OF 8 USPATFULL on STN

ACCESSION NUMBER: 2004:300069 USPATFULL Full-text

TITLE: Tocopherols, tocotrienols, other chroman and side chain derivatives and uses thereof

INVENTOR(S): Sanders, Bob G., Austin, TX, UNITED STATES
Kline, Kimberly, Austin, TX, UNITED STATES
Hurley, Laurence, Austin, TX, UNITED STATES
Gardner, Robb, Austin, TX, UNITED STATES
Menchaca, Marla, Austin, TX, UNITED STATES
Yu, Weiping, Austin, TX, UNITED STATES
Ramanan, Puthucode N., Austin, TX, UNITED STATES
Liu, Shenquan, Austin, TX, UNITED STATES
Israel, Karen, Austin, TX, UNITED STATES

PATENT ASSIGNEE(S): Research Development Foundation (U.S. corporation)

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 2004235938	A1	20041125
APPLICATION INFO.:	US 2003-644418	A1	20030820 (10)

RELATED APPLN. INFO.: Division of Ser. No. US 2000-502592, filed on 11 Feb 2000, GRANTED, Pat. No. US 6770672 Continuation-in-part of Ser. No. US 1999-404001, filed on 23 Sep 1999, GRANTED, Pat. No. US 6417223

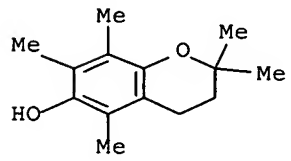
	NUMBER	DATE
PRIORITY INFORMATION:	US 1998-101542P	19980923 (60)

DOCUMENT TYPE: Utility
FILE SEGMENT: APPLICATION
LEGAL REPRESENTATIVE: Benjamin Aaron Adler, ADLER & ASSOCIATES, 8011 Candle Lane, Houston, TX, 77071
NUMBER OF CLAIMS: 30
EXEMPLARY CLAIM: 1
NUMBER OF DRAWINGS: 21 Drawing Page(s)
LINE COUNT: 2556
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB The present invention provides an antiproliferative compound having the structural formula ##STR1##

wherein X is oxygen, nitrogen or sulfur; Y is selected from the group consisting of oxygen, nitrogen and sulfur wherein when Y is oxygen or nitrogen, n is 1 and when Y is sulfur, n is 0. Also provided is a method for inducing apoptosis in a cell comprising administering a composition comprising a compound.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.
IT 950-99-2
(preparation of tocopherols, tocotrienols, other chroman and side chain derivs. for use as antitumor agents and for inducing cell apoptosis)
RN 950-99-2 USPATFULL
CN 2H-1-Benzopyran-6-ol, 3,4-dihydro-2,2,5,7,8-pentamethyl- (9CI) (CA INDEX NAME)



L7 ANSWER 4 OF 8 USPATFULL on STN
ACCESSION NUMBER: 2004:192666 USPATFULL Full-text
TITLE: Tocopherols, tocotrienols, other chroman and side chain derivatives and uses thereof
INVENTOR(S): Sanders, Bob G., Austin, TX, United States
Kline, Kimberly, Austin, TX, United States
Hurley, Laurence, Austin, TX, United States
Gardner, Robb, Austin, TX, United States
Menchaca, Marla, Austin, TX, United States
Yu, Weiping, Austin, TX, United States
Ramanan, Puthucode N., Austin, TX, United States
Liu, Shenquan, Austin, TX, United States
Israel, Karen, Austin, TX, United States
PATENT ASSIGNEE(S): Research Development Foundation, Carson City, NV, United States (U.S. corporation)

	NUMBER	KIND	DATE

PATENT INFORMATION:	US 6770672	B1	20040803
APPLICATION INFO.:	US 2000-502592		20000211 (9)
RELATED APPLN. INFO.:	Continuation-in-part of Ser. No. US 1999-404001, filed on 23 Sep 1999, now patented, Pat. No. US 6417223, issued on 9 Jul 2002		

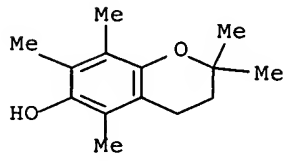
	NUMBER	DATE
PRIORITY INFORMATION:	US 1998-101543P	19980923 (60)

DOCUMENT TYPE: Utility
FILE SEGMENT: GRANTED
PRIMARY EXAMINER: Fonda, Kathleen K.
ASSISTANT EXAMINER: Maier, Leigh C.
LEGAL REPRESENTATIVE: Adler, Benjamin Aaron
NUMBER OF CLAIMS: 4
EXEMPLARY CLAIM: 1
NUMBER OF DRAWINGS: 18 Drawing Figure(s); 21 Drawing Page(s)
LINE COUNT: 2359
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB The present invention provides an antiproliferative compound having the structural formula ##STR1##

wherein X is oxygen, nitrogen or sulfur; Y is selected from the group consisting of oxygen, nitrogen and sulfur wherein when Y is oxygen or nitrogen, n is 1 and when Y is sulfur, n is 0. Also provided is a method for inducing apoptosis in a cell comprising administering a composition comprising a compound.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.
IT 950-99-2, 2,2,5,7,8-Pentamethyl-6-chromanol
(preparation of tocopherols, tocotrienols, other chroman and side chain derivs. for therapeutic use in prevention and treatment of cancer)
RN 950-99-2 USPATFULL
CN 2H-1-Benzopyran-6-ol, 3,4-dihydro-2,2,5,7,8-pentamethyl- (9CI) (CA INDEX NAME)



L7 ANSWER 5 OF 8 USPATFULL on STN

ACCESSION NUMBER:	2004:127448 USPATFULL	Full-text
TITLE:	Tocopherols, tocotrienols, other chroman and side chain derivatives and uses thereof	
INVENTOR(S):	Sanders, Bob G., Austin, TX, UNITED STATES Kline, Kimberly, Austin, TX, UNITED STATES Yu, Weiping, Austin, TX, UNITED STATES	
PATENT ASSIGNEE(S):	Research Development Foundation (U.S. corporation)	

NUMBER	KIND	DATE

PATENT INFORMATION:	US 2004097431	A1	20040520
APPLICATION INFO.:	US 2003-695275	A1	20031028 (10)

RELATED APPLN. INFO.: Division of Ser. No. US 2001-8066, filed on 5 Nov 2001, GRANTED, Pat. No. US 6703384 Continuation-in-part of Ser. No. US 2000-502592, filed on 11 Feb 2000, PENDING Continuation-in-part of Ser. No. US 1999-404001, filed on 23 Sep 1999, GRANTED, Pat. No. US 6417223

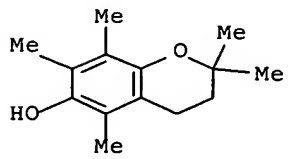
	NUMBER	DATE
PRIORITY INFORMATION:	US 1998-101542P	19980923 (60)

DOCUMENT TYPE: Utility
FILE SEGMENT: APPLICATION
LEGAL REPRESENTATIVE: Benjamin Aaron Adler, Ph.D., J.D., Adler & Associates, 8011 Candle Lane, Houston, TX, 77071
NUMBER OF CLAIMS: 17
EXEMPLARY CLAIM: 1
NUMBER OF DRAWINGS: 11 Drawing Page(s)
LINE COUNT: 2605
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB The present invention provides an antiproliferative compound having a structural formula ##STR1##

where X and Y independently are oxygen, nitrogen or sulfur; R.sup.1 is alkyl, alkenyl, alkynyl, aryl, heteroaryl, carboxylic acid, carboxylate, carboxamide, ester, thioamide, thiolacid, thiolester, saccharide, alkoxy-linked saccharide, amine, sulfonate, sulfate, phosphate, alcohol, ethers or nitrites; R.sup.2 and R.sup.3 are hydrogen or R.sup.4; R.sup.4 is methyl, benzyl carboxylic acid, benzyl carboxylate, benzyl carboxamide, benzylester, saccharide or amine; and R.sup.5 is alkenyl; where when Y is nitrogen, said nitrogen is substituted with R.sup.6, wherein R.sup.6 is hydrogen or methyl. Also provided are methods for treating a cell proliferative disease and for inducing apoptosis in a cell comprising administering this compound is also provided.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.
IT 950-99-2
(preparation of tocopherols, tocotrienols, other chroman and side chain derivs. for use as antitumor agents and for inducing cell apoptosis)
RN 950-99-2 USPATFULL
CN 2H-1-Benzopyran-6-ol, 3,4-dihydro-2,2,5,7,8-pentamethyl- (9CI) (CA INDEX NAME)



L7 ANSWER 6 OF 8 USPATFULL on STN
ACCESSION NUMBER: 2002:280579 USPATFULL Full-text
TITLE: Tocopherols, tocotrienols, other chroman and side chain

derivatives and uses thereof

INVENTOR(S): Sanders, Bob G., Austin, TX, UNITED STATES
Kline, Kimberly, Austin, TX, UNITED STATES
Hurley, Laurence, Austin, TX, UNITED STATES
Gardner, Robb, Austin, TX, UNITED STATES
Menchaca, Marla, Austin, TX, UNITED STATES
Yu, Weiping, Austin, TX, UNITED STATES
Ramanan, Puthucode N., Austin, TX, UNITED STATES
Liu, Shenquan, Austin, TX, UNITED STATES
Israel, Karen, Austin, TX, UNITED STATES
PATENT ASSIGNEE(S): Research Development Foundation (U.S. corporation)

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 2002156024	A1	20021024
	US 6645998	B2	20031111
APPLICATION INFO.:	US 2002-122019	A1	20020412 (10)

RELATED APPLN. INFO.: Division of Ser. No. US 1999-404001, filed on 23 Sep 1999, GRANTED, Pat. No. US 6417223

	NUMBER	DATE
PRIORITY INFORMATION:	US 1998-101542P	19980923 (60)

DOCUMENT TYPE: Utility
FILE SEGMENT: APPLICATION
LEGAL REPRESENTATIVE: Benjamin Aaron Adler, ADLER & ASSOCIATES, 8011 Candle Lane, Houston, TX, 77071
NUMBER OF CLAIMS: 20
EXEMPLARY CLAIM: 1
NUMBER OF DRAWINGS: 14 Drawing Page(s)
LINE COUNT: 2170

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB The present invention provides an antiproliferative compound having the structural formula ##STR1##

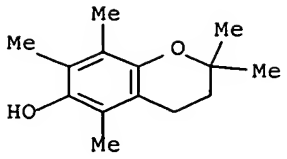
wherein X is oxygen, nitrogen or sulfur; R.sup.1 is alkyl, alkenyl, alkynyl, aryl, heteroaryl, carboxylic acid, carboxylate, carboxamide, ester, thioamide, thiolacid, thiolester, saccharide, alkoxy-linked saccharide, amine, sulfonate, sulfate, phosphate, alcohol, ethers and nitriles; R.sup.2 is hydrogen, methyl, benzyl carboxylic acid, benzyl carboxylate, benzyl carboxamide, benzylester, saccharide and amine; R.sup.3 is selected from the group consisting of hydrogen, methyl, benzyl carboxylic acid, benzyl carboxylate, benzyl carboxamide, benzylester, saccharide and amine; R.sup.4 is of methyl, benzyl carboxylic acid, benzyl carboxylate, benzyl carboxamide, benzylester, saccharide and amine; and R.sup.5 is alkyl, alkenyl, alkynyl, aryl, heteroaryl, carboxyl, amide and ester. Also provided is a method for inducing apoptosis in a cell comprising administering a composition comprising a compound.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

IT 950-99-2
(preparation of tocopherols, tocotrienols, other chroman and side chain derivs. for use as antitumor agents and for inducing cell apoptosis)

RN 950-99-2 USPATFULL

CN 2H-1-Benzopyran-6-ol, 3,4-dihydro-2,2,5,7,8-pentamethyl- (9CI) (CA INDEX NAME)



L7 ANSWER 7 OF 8 USPATFULL on STN

ACCESSION NUMBER:	2002:199098 USPATFULL Full-text
TITLE:	Tocopherols, tocotrienols, other chroman and side chain derivatives and uses thereof
INVENTOR(S):	Sanders, Bob G., Austin, TX, UNITED STATES Kline, Kimberly, Austin, TX, UNITED STATES Yu, Weiping, Austin, TX, UNITED STATES

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 2002107207	A1	20020808
	US 6703384	B2	20040309
APPLICATION INFO.:	US 2001-8066	A1	20011105 (10)

RELATED APPLN. INFO.: Continuation-in-part of Ser. No. US 2000-502592, filed on 11 Feb 2000, PENDING Continuation-in-part of Ser. No. US 1999-404001, filed on 23 Sep 1999, PENDING

	NUMBER	DATE
PRIORITY INFORMATION:	US 1998-101542P	19980923 (60)

DOCUMENT TYPE:	Utility
FILE SEGMENT:	APPLICATION
LEGAL REPRESENTATIVE:	Benjamin Aaron Adler, ADLER & ASSOCIATES, 8011 Candle Lane, Houston, TX, 77071
NUMBER OF CLAIMS:	24
EXEMPLARY CLAIM:	1
NUMBER OF DRAWINGS:	12 Drawing Page(s)
LINE COUNT:	2606

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

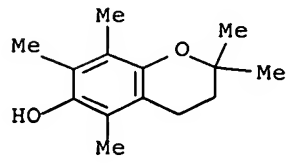
AB The present invention provides an antiproliferative compound having a structural formula ##STR1##

where X and Y independently are oxygen, nitrogen or sulfur; R.sup.1 is alkyl, alkenyl, alkynyl, aryl, heteroaryl, carboxylic acid, carboxylate, carboxamide, ester, thioamide, thiolacid, thiolester, saccharide, alkoxy-linked saccharide, amine, sulfonate, sulfate, phosphate, alcohol, ethers or nitrites; R.sup.2 and R.sup.3 are hydrogen or R.sup.4; R.sup.4 is methyl, benzyl carboxylic acid, benzyl carboxylate, benzyl carboxamide, benzylester, saccharide or amine; and R.sup.5 is alkenyl; where when Y is nitrogen, said nitrogen is substituted with R.sup.6, wherein R.sup.6 is hydrogen or methyl. Also provided are methods for treating a cell proliferative disease and for inducing apoptosis in a cell comprising administering this compound is also provided.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

IT 950-99-2, 2,2,5,7,8-Pentamethyl-6-chromanol
(preparation of tocopherols, tocotrienols, other chromans and side chain derivs. as potential antiproliferative, proapoptotic agents for the

treatment of cancer)
RN 950-99-2 USPATFULL
CN 2H-1-Benzopyran-6-ol, 3,4-dihydro-2,2,5,7,8-pentamethyl- (9CI) (CA INDEX NAME)



L7 ANSWER 8 OF 8 USPATFULL on STN
ACCESSION NUMBER: 2002:168253 USPATFULL Full-text
TITLE: Tocopherols, tocotrienols, other chroman and side chain derivatives and uses therof
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PATENT ASSIGNEE(S): Research Development Foundation, Carson City, NV, United States (U.S. corporation)

	NUMBER	KIND	DATE	
PATENT INFORMATION:	US 6417223	B1	20020709	
APPLICATION INFO.:	US 1999-404001		19990923	(9)

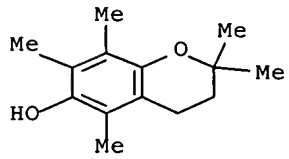
	NUMBER	DATE
PRIORITY INFORMATION:	US 1998-101542P	19980923 (60)

DOCUMENT TYPE: Utility
FILE SEGMENT: GRANTED
PRIMARY EXAMINER: Wilson, James O.
ASSISTANT EXAMINER: Maier, Leigh C.
LEGAL REPRESENTATIVE: Adler, Benjamin Aaron
NUMBER OF CLAIMS: 3
EXEMPLARY CLAIM: 1
NUMBER OF DRAWINGS: 14 Drawing Figure(s); 14 Drawing Page(s)
LINE COUNT: 1959
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB The present invention provides an antiproliferative compound having the structural formula ##STR1##

wherein X is oxygen, nitrogen or sulfur; R.sup.1 is alkyl, alkenyl, alkynyl, aryl, heteroaryl, carboxylic acid, carboxylate, carboxamide, ester, thioamide, thiolacid, thiolester, saccharide, alkoxy-linked saccharide, amine, sulfonate, sulfate, phosphate, alcohol, ethers and nitriles; R.sup.2 is hydrogen, methyl, benzyl carboxylic acid, benzyl carboxylate, benzyl carboxamide, benzylester, saccharide and amine; R.sup.3 is selected from the

group consisting of hydrogen, methyl, benzyl carboxylic acid, benzyl carboxylate, benzyl carboxamide, benzylester, saccharide and amine; R.sup.4 is of methyl, benzyl carboxylic acid, benzyl carboxylate, benzyl carboxamide, benzylester, saccharide and amine; and R.sup.5 is alkyl, alkenyl, alkynyl, aryl, heteroaryl, carboxyl, amide and ester. Also provided is a method for inducing apoptosis in a cell comprising administering a composition comprising a compound.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.
IT 950-99-2
(preparation of tocopherols, tocotrienols, other chroman and side chain derivs. for use as antitumor agents and for inducing cell apoptosis)
RN 950-99-2 USPATFULL
CN 2H-1-Benzopyran-6-ol, 3,4-dihydro-2,2,5,7,8-pentamethyl- (9CI) (CA INDEX NAME)



=> d his

(FILE 'HOME' ENTERED AT 16:10:46 ON 29 JAN 2007)

FILE 'REGISTRY' ENTERED AT 16:10:59 ON 29 JAN 2007
L1 STRUCTURE UPLOADED
L2 0 S L1
L3 7 S L1 EXA FULL

FILE 'MEDLINE, CAPLUS, WPIDS, USPATFULL' ENTERED AT 16:11:32 ON 29 JAN 2007
L4 494 S L3
L5 443 S L4 NOT PY>2004
L6 10 S L5 AND CANCER
L7 8 S L5 AND "PROSTATE CANCER"

=>

---Logging off of STN---

=>
Executing the logoff script...

=> LOG Y

COST IN U.S. DOLLARS	SINCE FILE ENTRY	TOTAL SESSION
FULL ESTIMATED COST	110.25	168.71

DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS)	SINCE FILE ENTRY	TOTAL SESSION
CA SUBSCRIBER PRICE	-2.34	-2.34

STN INTERNATIONAL LOGOFF AT 16:16:00 ON 29 JAN 2007